



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/698,242

10/31/2003

Marc P. Schuyler

Q71333

2416

7590 06/04/2007  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

BANGACHON, WILLIAM L

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

06/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/698,242

Applicant(s)

SCHUYLER ET AL.

Examiner

William L. Bangachon

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-22 and 24-40 is/are rejected.
- 7) ☒ Claim(s) 1-40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) ✓  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Examiner Remarks.

## DETAILED ACTION

### *Remarks*

1. In response to the application filed 10/31/2003, the application has been thoroughly examined. The Examiner has fully considered the presentation of claims in view of the disclosure and the current state of the prior art. It is the Examiner's position that the application is not in condition for allowance for the reasons set forth in this Office action:

### *Claim Objections*

2. Claims 1-14, 25 and 39 are objected to because of the following informalities:

It is noted that the clause "**configured to**" has been used in claims 1, 3-7, 9, 12, 14, 25 and 39, and the clause "**operable to**" has been used in claim 10. The "configured to" and "operable to" clauses, which suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure, does not limit the scope of a claim or claim limitation. See MPEP 2106. It has been held that the recitation that an element, which suggests of performing an action is not a positive limitation, but only requires the ability to do so. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138. It is suggested that the "configured to" and "operable to" clauses taken out of the claims to thereby recite a positive limitation. Appropriate correction is required.

Since claims 2, 8 and 10-11 are dependent on objected claim 1, claims 2, 8 and 10-11 are objected to for the same reason.

***Specification***

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The limitations recited in claims 14 and 27 lacks antecedent basis in the specification.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 28-32 and 40 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 28-32 and 40, the machine-readable instructions stored in a machine-readable medium for causing the machine to perform a method, is considered not a part of the machine. Although, stored in a machine-readable medium, the intended use of the machine-readable instructions is not considered a limitation (see MPEP 2111.02, Preamble Statements Reciting Purpose or Intended Use). As such, the machine-readable instructions are considered as merely a set of instructions stored in a disk or flash memory (i.e. claimed machine-readable medium) without the components in the machine that executes the machine-readable instructions. Therefore, claims 28-

Art Unit: 2612

32 and 40 are considered non-statutory subject matter. See MPEP 2106.01. It is suggested that the preamble in claims 28 and 40 changed to "A computer storing machine-readable instructions for causing a machine to:" or "A computer-readable medium storing computer-readable instructions for causing a machine to:" to thereby recite a statutory subject matter.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 2612

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-9, 11-22 and 24-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,504,470 {hereinafter 'Puchek et al'} in view of US Patent 6,411,213 {hereinafter 'Vega et al'}.

Regarding claims 1 and 2 in the present invention, Puchek et al teach, an access control apparatus for selectively granting access to an area comprising a controller including a processor and memory, a data collection device coupled to the controller, a access control device, a video camera, and a sensor configured to monitor an entrance to the area. The controller is operative to compare entrance data, which includes identification data, collected by the data collection device with stored data in the memory and to operate the access control device to grant access to the area when the identification data corresponds to the stored data. The controller also is operative to repeatedly record image data output by the video camera in the memory for a predetermined period of time and to present the image data for review when a signal from the sensor indicate that a number of people entering the area does not correspond to the number of people indicated by the entrance data. See Puchek et al, column 4 and lines 30-56. Counting can be accomplished with biometric parameter collection device 36 or with any appropriate sensor, such as a photo sensor, proximity sensor, or

Art Unit: 2612

the like. See Puchek et al, column 8 and lines 40-44+. The facial recognition engine in the biometric parameter collection device 36 can distinguish faces and thus can act as a sensor to count people passing thereby. Alternatively, a separate proximity sensor, light beam, or the like can be used to count people passing through the entrance. If the number counted does not correspond to the number of guests requested, image data of the guests entry recorded by biometric parameter sensing device 36 or a separate video camera is presented for review by security or other personnel in step 1. Counting of guests can be initiated and when the door is opened (by use of a door sensor or the like) and can be terminated when the door is closed. See Puchek et al, column 7, lines 37-47+. As such, the system of Puchek et al meets the claimed "object detector" in the form of a biometric parameter sensing device 36, "token reader" in the form of a separate proximity sensor that senses a person {see Puchek et al, column 7 and lines 13+}, and "access controller" in the form of an access unit 20 located in close proximity to the access areas {see Puchek et al, column 5, lines 44-50+} and programmed to detect anomalies under any set of conditions, such as unauthorized persons gaining access on the coattails of authorized persons could be flagged. This implies "determining whether each detected persons is carrying a permissioned token based upon the computed characteristics linking persons and tokens", as claimed {see Puchek et al, column 8, lines 51-55+}. Although Puchek et al does not disclose "interrogating tokens present within a token reader area", such token readers are within the scope and/or an obvious variation of the proximity sensors of Pucket et al. As such, Vega et al is cited to teach of such token readers as claimed, in the form of an exciter/reader 212

Art Unit: 2612

for interrogating RFID tag 218 (i.e. claimed "token"). Vega et al suggests that the combined exciter/reader 212 (token reader) is advantageous because **it can be suitably coupled to a data management system for counting, tracking, or otherwise managing movement of livestock** {see Vega et al, paragraph-bridging columns 7 and 8}. Although, Vega et al counts, track, or manage livestock with the use of the RFID tag 218, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include counting, tracking, or managing the movement of people with the use of the RFID tag 218 by simply attaching the RFID tag 218 (token) to a person. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include "interrogating tokens present within a token reader area" in the system of Puchek et al because, as evidenced by Vega et al, it can be suitably coupled to a data management system for counting, tracking, or otherwise managing movement of livestock. And when the RFID tag 218 (token) is attached to a person, it can be suitably coupled to a data management system for counting, tracking, or otherwise managing movement of people.

In claim 3, Puchek et al teach, the facial recognition engine in the biometric parameter collection device 36 can distinguish faces and thus can act as a sensor to count people passing thereby. Alternatively, a separate proximity sensor, light beam, or the like can be used to count people passing through the entrance. If the number counted does not correspond to the number of guests requested, image data of the guests entry recorded by biometric parameter sensing device 36 or a separate video camera is presented for review by security or other personnel {see Puchek et al, column



Art Unit: 2612

7, lines 37-47+}. This implies that when both the biometric parameter collection device 36 and separate proximity sensor is used to count people passing through the entrance, the number of people counted by the biometric parameter collection device 36 and the number of people counted by the proximity sensor will be the same unless anomalies occur that will be flagged, such as unauthorized persons gaining access on the coattails of authorized persons {see Puchek et al, column 8, lines 51-55+}. This meets the claimed "tallying a count of persons based on the object detector and token reader". In this case, the proximity sensor may have counted two people but the facial recognition device can only count one person since the other person is hiding on the coattail of the other person.

In claims 4-5, Puchek et al teach, when the access unit 20 detects an anomaly, such as an unauthorized person gaining access on the coattails of authorized persons so that the proximity sensor counts two people but the facial recognition device can only count one person, as stated above, an alarm can be sounded {see Puchek et al, column 8, lines 51-55+; column 7 and lines 49-53+}.

In claim 6, Puchek et al teach, granting access when the person carrying a token without a guest {see Puchek et al, column 7, lines 24-26}. This implies a one to one correspondence between the person count and token count, as claimed.

In claims 7-8, Puchek et al teach, the biometric parameter sensing device 36 can be in constant operations and can begin to sense facial parameters when a person is within a prescribed range {see Puchek et al, column 6, lines 65-67}. This meets the

Art Unit: 2612

claimed vision-based tracking of a person within the detection area over time, as claimed.

In claim 9, Puchek et al teach, the biometric parameter-sensing device 36 (i.e. object detector) serves as an entrance data collection device and a sensor, and is a video camera for sensing facial parameters. The phrase "video camera" refers to any device capable of sensing image parameters. This meets the limitations of the object detector, as claimed. Access unit 20 has a control program stored in memory device 24, which includes a biometric engine and instructions for accomplishing the functions described below. Access unit 20 can be divided into access panel 20a (including input device 28, display 30, microphone 32, speaker 34, biometric parameter sensing device 36, and access control device 38) and controller 20b (including CPU 22, memory device 24, and RAM 26). This meets the limitations of the processing system as claimed. See Puchek et al, column 5, lines 18-36.

In claim 11, Puchek et al teach, the movements of each member and guests are logged and time stamped {see Puchek et al, column 8, lines 17-18}.

The limitations recited in claim 12 recite the interrogator of Fletcher et al cited in claim 1 and therefore rejected for the same reasons.

In claim 13, although Puchek et al does not disclose, "measuring the separation distance between persons and tokens", it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include measuring the separation distance between persons and tokens in Puchek et al because this indicates whether the person has dropped or lost a token.

Claim 14 recites the limitations in claim 13, and although Puchek et al does not disclose, "generating a signal when a detected person is separated from a nearest token by a distance measure that exceeds a preselected threshold", it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include such limitations in the Puchek et al because the person will be notified that he/she dropped a token when separated by several feet and so that the person will not lose a token.

The limitations for practicing the method of claims 15-22 and 24-27 have already been addressed in the rejection of claims 1-9 and 11-14, and therefore rejected for the same reasons.

The limitations recited in claims 28-32 have already been addressed in the rejection of claims 1, 2, 7, 9, and 13, and therefore rejected for the same reasons.

The limitations for practicing the method recited in claim 33 have already been addressed in the rejection of claim 2, and therefore rejected for the same reasons.

The limitations recited in claim 33 have already been addressed in the rejection of claim 2 and therefore rejected for the same reasons.

The limitations for practicing the method recited in claim 34 have already been addressed in the rejection of claim 5 and therefore rejected for the same reasons. As taught by Puchek et al, plural access units 20 can be provided on the doors of several entrances of a building. This meets the claimed second area {see Puchek et al, column 5, lines 50-55+}.

In claim 35, although Puchek et al does not disclose, "detecting tokens crossing into and out of the first second area", it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include such claimed features in Puchek et al because the tokens are detected whenever the proximity sensor senses the tokens carried by a user {see Puchek et al, column 7, lines 1-3}.

In claim 36, although Puchek et al does not disclose, "subtracting a count of persons going out of the first area from the count of persons going into the first area", it would have been obvious to one of ordinary skill in the art, at the time of applicant's invention, to include such claimed features in the system of Puchek et al because Puchek et al teach that it is desirable to know if a particular authorized person or persons, gains access more than a preset number of times {see Puchek et al, column 8, lines 46-49+}.

Claim 37 recites the limitations in claim 35 except tokens are detected in one of the several entrances of the building, other than the first entrance (i.e. second area).

Claim 38 recites the limitations in claim 36 except subtracting, as claimed, is performed in one of the several entrances of the building, other than the first entrance (i.e. second area).

The limitations recited in claim 39 have already been addressed in the rejection of claim 5 and therefore rejected for the same reasons.

The limitations recited in claim 40 have already been addressed in the rejection of claim 34 and therefore rejected for the same reasons.

***Conclusion***

10. Claims 10 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Office Contact Information***

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to William L. Bangachon whose telephone number is (571)-272-3065. The Examiner can normally be reached from Monday through Friday, 9:00 AM to 5:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Brian Zimmerman can be reached on (571)-272-3059. The fax phone numbers for the organization where this application or proceeding is assigned is (571)-273-8300 for regular and After Final formal communications. The Examiner's fax number is (571)-273-3065 for informal communications.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Art Unit: 2612

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-6071.

William L Bangachon  
Examiner  
Art Unit 2612

May 24, 2007



**BRIAN ZIMMERMAN**  
**PRIMARY EXAMINER**